

Journal Articles, Books, and Book Chapters

The Effect of Tetravalent Titanium Substitution in $\text{LiNi}_{1-x}\text{Ti}_x\text{O}_2$ ($0.025 \leq x \leq 0.2$) System

J. Kim and K. Amine

Electrochem. Commun. **3**, 52–55 (2001)

Angular Flow in Torid Cavity Probes

R. E. Gerald II

J. Magn. Reson. **151**, 284–290 (2001)

An Accelerated Calendar and Cycle Life Study of Li-ion Cells

I. Bloom, B. W. Cole, J. J. Sohn, S. A. Jones, E. G. Polzin, V. S. Battaglia, G. L. Henriksen, C. Motloch, R. Richardson, T. Unkelhaeuser, D. Ingersoll, and H. L. Case

J. Power Sources **101**, 238–247 (2001)

Symmetric Cell Approach Towards Simplified Study of Cathode and Anode Behavior in Lithium-Ion Batteries

C. H. Chen, J. Liu, and K. Amine

Electrochem. Commun. **3**(1), 44–47 (2001)

An *In-Situ* X-Ray Absorption Spectroscopy Study of InSb Electrodes in Lithium Batteries

A. J. Kropf, H. Tostmann, C. S. Johnson, J. T. Vaughey, and M. M. Thackeray
APS Forefront **1**(ANL/APS/TB-42), 113–116 (2001)

Formaldehyde Determination in Supercritical CO_2

J. W. Rathke, L. M. Wojcinski, R. J. Klingler, M. J. Chen, and R. E. Gerald II
The Chemist **78**(4), 7–10 (2001)

Angular Flow in Toroid Cavity Probes

P. Trautner, K. Woelk, J. Bargon, and R. E. Gerald II

J. Magn. Reson. **151**, 284–290 (2001)

Factors Responsible for Impedance Rise in High Power Lithium Ion Batteries

K. Amine, C. H. Chen, J. Liu, M. J. Hammond, A. N. Jansen, I. Bloom, D. R. Vissers, and G. L. Henriksen

J. Power Sources **97**–**98**, 684–687 (2001)

Ionic Conductivity, Lithium Insertion and Extraction of Lanthanum Lithium Titanate

C. H. Chen and K. Amine

Solid State Ionics **144**, 51–57 (2001)

Rare-Earth Elements in Synthetic Zircon. Part 2. A Single-Crystal X-ray Study of Xenotime Substitution

R. J. Finch, J. M. Hanchar, P. W. O. Hoskin, and P. C. Burns
Am. Mineral. **86**, 681–689 (2001)

Phase Transitions in Lithiated Cu₂Sb Anodes for Lithium Batteries: An *In-situ* X-ray Diffraction Study

L. Fransson, J. T. Vaughey, R. Benedek, K. Edstrom, J. O. Thomas, and M. M. Thackeray
Electrochim. Commun. **3**, 317–323 (2001)

High-Temperature Oxidation and Corrosion of Structural Materials in Molten Chlorides
J. E. Indacochea, J. L. Smith, K. R. Litko, E. J. Karell, and A. G. Raraz
Oxidat. Met. **55**(1–2), 1–16 (2001)

Solvent Extraction of Tc and Cs from Alkaline Nitrate Wastes

B. A. Moyer, P. V. Bonnesen, L. H. Delmau, T. J. Haverlock, R. A. Sachleben, R. A. Leonard, C. Conner, and G. J. Lumetta
In *Solvent Extraction for the 21st Century*, Eds., M. Cox, M. Hidalgo, and M. Valiente, Soc. of Chemical Industry, London, England, Proc. Int. Solvent Extraction Conf. (ISEC), Barcelona, Spain, July 11–16, 1999, Vol. 2, pp. 1365–1369 (2001)

Structural and Mechanistic Features of Intermetallic Materials for Lithium Batteries
J. T. Vaughey, C. S. Johnson, A. J. Kropf, R. Benedek, M. M. Thackeray, H. Tostmann, T. Sarakonsri, S. Hackney, L. Fransson, K. Edström, and J. O. Thomas
J. Power Sources **97**–**98**, 194–197 (2001)

Occlusion and Ion Exchange in the Molten (Lithium Chloride-Potassium Chloride-Alkali Metal Chloride) Salt + Zeolite 4A System with Alkali Metal Chlorides of Sodium, Rubidium, and Cesium

D. Lexa and I. Johnson
Metall. Mater. Trans. **32B**, 429–435 (2001)

Materials Development for Lower Temperature Solid Oxide Fuel Cells

J. M. Ralph, A. C. Schoeler, and M. Krumpelt
J. Mater. Sci. **36**(5), 1161 (2001)

Microscopy and Neutron Diffraction Study of a Zirconium-8 wt% Stainless Alloy

D. P. Abraham, J. W. Richardson Jr., and S. M. McDeavitt
J. Mater. Sci. **36**, 5143–5154 (2001)

First-Principles Calculations for Li Insertion into InSb

R. Benedek, J. T. Vaughey, M. M. Thackeray, L. H. Yang, and R. Prasad
J. Power Sources **97**–**98**, 201–203 (2001)

In Situ Nuclear Magnetic Resonance Investigations of Lithium Ions in Carbon Electrode Materials Using a Novel Detector

R. E. Gerald II, J. Sanchez, C. S. Johnson, R. J. Klingler, and J. W. Rathke
J. Phy. Condens. Matter **13**, 8269–8285 (2001)

Chemical Partitioning Technologies for an ATW System

J. J. Laidler, E. D. Collins, J. Duguid, R. N. Henry, J. Hill, E. J. Karel, S. M. McDeavitt, M. Thompson, M. A. Williamson, and J. L. Willit
Prog. Nucl. Eng. **38**(1–2), 65–79 (2001)

Microemulsions of Water in Supercritical Carbon Dioxide: An *In-Situ* NMR Investigation of Micelle Formation and Structure

D. E. Fremgen, E. S. Smotkin, R. E. Gerald II, R. J. Klinger, and J. W. Rathke
J. Supercrit. Fluids **19**, 287–298 (2001)

Rare-Earth Elements in Synthetic Zircon. Part 1. Synthesis, and Rare Earth Element and Phosphorus Doping

J. M. Hanchar, R. J. Finch, E. B. Watson, P. C. Burns, D. Cherniak, and A. N. Mariano
Am. Mineral. **86**, 667–680 (2001)

Fuel Processors for Automotive Fuel Cell Systems: A Parametric Analysis

E. D. Doss, R. Kumar, R. K. Ahluwalia, and M. Krumpelt
J. Power Sources **105**, 1–15 (2001)

Investigation of the Initial Stages of Processing Bi-2223 Multifilamentary Tapes by Analytical Electron Microscopy

T. G. Holesinger, A. Ayala, R. M. Barceanu, and V. A. Maroni
IEEE Trans. Applied Superconductivity **11**(1), 2991–2994 (2001)

Dimeric Aggregates of Five-Coordinated Methyl(phthalocyaninato) Rh(III): ^1H NMR Evidence for the Staggered and Slipped Cofacial Dimers

M. J. Chen and J. W. Rathke
J. Porphyrins Phthalocyanines **5**, 528–536 (2001)

Studies of Mg-Substituted $\text{Li}_{4-x}\text{Mg}_x\text{Ti}_5\text{O}_{12}$ Spinel Electrodes for Lithium Batteries

C. H. Chen, J. T. Vaughey, A. N. Jansen, D. W. Dees, A. J. Kahaian, T. Goacher, and M. M. Thackeray
J. Electrochem. Soc. **148**(1) A102–A104 (2001)

Texture Development and Superconducting Properties of YBa_2Cu_3 Thin Films Prepared by a Solution Process in Low Oxygen Partial Pressure

Y.-A. Jee, B. Ma, V. A. Maroni, M. Li, B. L. Fisher, and U. Balachandran
Supercond. Sci. Technol. **14**, 285–291 (2001)

Symmetric Cell Approach and Impedance Spectroscopy of High Power Lithium-Ion Batteries

C. H. Chen, J. Liu, and K. Amine

J. Power Sources **96**(2), 321ñ328 (2001)

Rh(III) Complexes of Singly and Doubly Reduced Phthalocyanine Ligands Generated by Chemical and Electrochemical Reduction

M. J. Chen, R. J. Klingler, and J. W. Rathke

J. Porphyrins and Phthalocyanines **5**, 442ñ448 (2001)

Changes of Conductivity with Salt Content, Solvent, Composition, and Temperature for Electrolytes of LiPF₆ in Ethylene Carbonate-Ethyl Methyl Carbonate

M. S. Ding, K. Xu, S. S. Zhang, K. Amine, G. L. Henriksen, and T. R. Jow

J. Electrochem Soc. **148**(10), A1196ñA1204 (2001)

Electrodeposition of Copper from Sulfate Electrolytes: Effects of Thiourea on Resistivity and Electrodeposition Mechanism of Copper

V. S. Donepudi, R. Venkatachalpathy, P. O. Ozemoyah, C. S. Johnson, and

J. P. Prakash

Electrochim. Solid-State Lett. **4**, C13ñ16 (2001)

Comparison of Texture Development and Superconducting Properties of YBCO Thin Films Prepared by TFA and PLD Processes

Y.-A. Jee, M. Li, B. Ma, V. A. Maroni, B. L. Fisher, and U. Balachandran

Physica C **356** 297ñ303 (2001)

Ammonia-and-Lithia-Doped Manganese Dioxide for 3 V Lithium Batteries

C. S. Johnson and M. M. Thackeray

J. Power Sources **97ñ98**, 437-442 (2001)

An In-Situ X-Ray Absorption Study of InSb Electrodes in Lithium Batteries

A. J. Kropf, H. Tostmann, C. S. Johnson, J. T. Vaughey, and M. M. Thackeray

Electrochim. Commun. **3**, 244ñ251 (2001)

Coupled Capillary Wave Fluctuations in Thin Aqueous Films on an Aqueous Subphase

M. Li, A. M. Tikhonov, D. J. Chaiko, and M. L. Schlossman

Phys. Rev. Lett. **86**, 5934ñ5937 (2001)

Solid Electrolyte Interphase Formation on Lithium-Ion Electrodes

Y. Wang, X. Guo, S. Greenbaum, J. Liu, and K. Amine

Electrochim. Solid-State Lett. **4**(6), A68ñA70 (2001)